## **CLAIMS**

1. A polyimide precursor liquid composition, comprising: at least one type of tetracarboxylic dianhydride or derivative

at least one type of diamine or derivative thereof; and a polar polymerization solvent;

wherein the polyimide precursor liquid composition further includes a cyclic compound; and

wherein the cyclic compound has a boiling point of 200°C or more and comprises carbon, hydrogen and oxygen atoms.

2. The polyimide precursor liquid according to claim 1,

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thereof

wherein the tetracarboxylic dianhydride or derivative thereof is at least one type of compound selected from the group consisting of the following chemical formulae A and B (where X represents - O -, - SO -, - SO<sub>2</sub> -, - CH<sub>2</sub> -, - CF<sub>2</sub> -, - C(CH<sub>3</sub>)<sub>2</sub> -, - C(CF<sub>3</sub>)<sub>2</sub> - or a direct bond);

3. The polyimide precursor liquid composition according to claim 1, wherein the diamine or derivative thereof is one type of compound selected from the group consisting of the following chemical

formulae I and II (where Y represents - O -, - S -, - SO -, - SO<sub>2</sub> -, - CH<sub>2</sub> -, - CF<sub>2</sub> -, - C(CH<sub>3</sub>)<sub>2</sub> -, - C(CF<sub>3</sub>)<sub>2</sub> -, - CO - or a direct bond);

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4. The polyimide precursor liquid composition according to claim 1, wherein the dielectric constant of the cyclic compound is not less than 30.

II.

- The polyimide precursor liquid composition according to claim 1, wherein the dipole moment of the cyclic compound is not less than 3 debye.
- 6. The polyimide precursor liquid composition according to claim 1, wherein when the solids portion of the polyimide precursor liquid is 100 mass parts, the polar polymerization solvent is in the range of 150 to 900 mass parts, and the cyclic compound is in the range of 15 to 750 mass parts.
- 7. The polyimide precursor liquid composition according to claim 1, wherein the polyimide precursor is polymerized in the polar polymerization solvent, after which the cyclic compound is added.
- 8. A polyimide precursor liquid composition that has been converted into an imide from a polyimide precursor liquid composition, the polyimide precursor liquid composition comprising:

at least one type of tetracarboxylic dianhydride or derivative thereof;

at least one type of diamine or derivative thereof; and a polar polymerization solvent;

wherein the polyimide precursor liquid composition further includes a cyclic compound; and

wherein the cyclic compound has a boiling point of 200°C or more and comprises carbon, hydrogen and oxygen atoms.

10 9. The polyimide coating film according to claim 8,

wherein when the polyimide coating film is a film or coating film that has a thickness of  $50 \pm 10$  micrometers ( $\mu$ m) and is irradiated with light of 420 nanometers (nm), the polyimide coating film shows a transmittance of 50% or more.

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10. The polyimide coating film according to claim 8,

wherein the glass transition temperature (Tg) of the polyimide coating film is  $200^{\circ}\text{C}$  or more.

20 11. The polyimide coating film according to claim 8,

wherein the water absorption of the polyimide coating film is 2.0% or less.

- 12. The polyimide coating film according to claim 8,
- wherein at least a single layer of a transparent, electrically conductive film is further formed on at least one side of the polyimide coating film.
  - 13. The polyimide coating film according to claim 12, wherein the electric resistance of the transparent, electrically

conductive film is  $1\times 10^{\cdot 2}~\Omega{\cdot}cm$  or less.

- 14. The polyimide coating film according to claim 8,
  wherein at least a single layer of a transparent film further is
  formed on at least one side of the polyimide coating film.
- 15. The polyimide coating film according to claim 14,
  wherein at least a single layer of a transparent, electrically
  conductive film is further formed on at least one side of the transparent
  10 film.
  - 16. The polyimide coating film according to claim 15, wherein the electric resistance of the transparent, electrically conductive film is  $1\times 10^{-2}~\Omega$ ·cm or less.

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